REMARKS

Claims 1-20 are all of the claims pending in the present Application. Claims 7-9 are withdrawn. New claims 13-20 are added.

It is noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 1, 7, and 10 are amended to place the independent claims into condition for appeal.

Claims 1, 3-6, and 10-12 stand rejected under 35 USC §103(a) as unpatentable over US Patent 5,541,753 to Raynes et al., further in view of US Patent 6,115,014 to Aoki et al. Claim 2 stands rejected under 35 USC §103(a) as unpatentable over Raynes, further in view of Kuo et al, SID 94 Digest , Vol. XXV, page 927-930.

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

As described and claimed, for example by claim 1, the present invention is directed to a liquid-crystal display (LCD) including a liquid-crystal layer provided between a pair of substrates so as to be oriented to bend alignment. A phase compensation plate is provided outside each of the substrates. The retardation of a light passing through the liquid-crystal layer and the phase compensation plates is limited to a value ½ or less of a minimum wavelength of the light relating to display.

The present invention addresses the problem demonstrated in Figure 10 in which the electrooptical characteristic of the LCD exhibits a transmittance curve of a shortest wavelength color as differing from other colors (e.g., the other two primary colors), thereby causing the need for different applied-voltage settings, as well as the problems of viewing angle and manufacturing cost.

In contrast, the present invention teaches a method to achieve a wide viewing angle by using OCB mode, wherein the manufacturing cost can be reduced by being able to use a single power supply, based on the retardation of the shortest wavelength color filter (e.g., the blue color filter).

II. THE PRIOR ART REJECTION

The Examiner alleges that Raynes essentially teaches the invention defined by claims 1, 3-6, and 10-12 but concedes that Raynes does "... not explicitly disclose a retardation value of a minimum wavelength of the light relating to display (i.e., blue color range of 388nm to 488 nm)." Nevertheless, the Examiner considers that the discussion in Raynes of visible light "... makes possible the claimed range of 380 nm to 488 nm, and such overlapping ranges are at least obvious."

The Examiner also concedes that Raynes fails to teach or suggest voltages being equalized for all colors and relies upon Aoki to overcome this deficiency.

Relative to claim 2, the Examiner concedes that Raynes fails to teach or suggest setting the birefringent index to 0.16 or less. To overcome this deficiency, the Examiner relies upon Table 2 of Kuo et al.

Applicants submit that the rejection currently of record has at least the following deficiencies, thereby failing to meet the initial burden of a *prima facie* rejection:

1. Relative to the independent claims 1 and 10, the rejection fails to demonstrate that the liquid crystal in Raynes is set to "bend alignment", as discussed in line 26 of page 12 through line 2 of page 13 and shown in Figure 4C. This description is a term of art and cannot be simply ignored in the prior art evaluation. Raynes fails to satisfy the plain meaning of the first claim limitation of the independent claims until such demonstration is made of record.

2. Relative to the independent claims, the rejection relies upon claim 10 of Raynes to demonstrate the second claim limitation. However, claim 10 of Raynes is dependent upon claim 9, which defines that a reflector is used, such as shown in Figure 7. As clearly shown in Figure 7, there is no phase compensation plate on each of the two substrates. Therefore, Raynes fails to satisfy the second claim limitation.

3. Relative to the independent claims, the rejection currently of record uses an improper legal standard: "*Thus, such disclosed range in Raynes et al. makes possible the claimed range of 380 nm to 488 nm, and such overlapping ranges are at least obvious.*"

The correct legal standard is whether Raynes teaches or suggests this feature, not whether it "makes possible" the limitation. Relative to the overlap in range, such overlap

renders the feature obvious only if the range is known in the art as being critical parameter for the claimed feature, as clearly described in MPEP 2144.05 II.B. The range described in the claims is related to the minimum wavelength light (e.g., blue) that is emitted from the device.

There is no suggestion in Raynes to set retardation as based upon any color, let alone the minimum wavelength light. Indeed, the Examiner's characterization of using the entire visible wavelength as a basis, if Raynes does so, clearly indicates that Raynes teaches against the present invention wherein a minimum wavelength is used to set retardation.

Hence, turning to the clear language of the claims, in Raynes there is no teaching or suggestion of: "... a liquid-crystal layer provided between a pair of substrates so as to be oriented to bend alignment; and a phase compensation plate provided for an outside of each of the substrates, a retardation of a light passing through said liquid-crystal layer and said phase compensation plates being limited to a value ½ or less of a minimum wavelength of said light relating to display", as required by independent claim 1. Independent claim 10 has similar language.

Relative to secondary reference Aoki, which the Examiner introduced to demonstrate the feature of the present invention for equalization of voltages for the different colors, Applicants submit that the description in claim 2 of Aoki deals with "frames", not different pixel colors. Therefore, Applicants submit that new claims 13 and 17 are clearly allowable over Raynes, even if modified by Aoki.

Relative to the rejection for claim 2, wherein the Examiner points to Table 2 of secondary reference Kuo, Applicants respectfully request that the Examiner specify which entry he considers to demonstrate the value cited in the claim, since this table does not seem to list this value, absent some clarification from the Examiner.

For the reasons stated above, the claimed invention is fully patentable over the cited references.

III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in

condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: 10/5/06

Frederick E. Cooperrider
Reg. No. 36,769

McGinn Intellectual Property Law Group, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, Virginia 22182
(703) 761-4100
Customer No. 21254